

Digital Audio/Video Recording Technology (DART) Evaluation Subcommittee

Summary of Discussion and Recommendations

Based on discussions during conference calls on June 25 & July 23, 2009

Members: Judge Bill Pattinson, Judge Lucy Gamon, Gerry Olson, Guy Cook, Scott Hand, Martha Lucey, Darin Raymond, Scott Ruhnke, Mary Tabor; subcommittee staff: John Goerd

A. The charge to the committee as stated in the order establishing the committee.

According to the order from the chief justice establishing this committee, the issues for evaluation include:

1. Reliability of digital recording technology,
2. Accuracy of the record made with this technology, and
3. Costs associated with acquiring and maintaining this technology.

B. Recommendations

Recommendation 1: *The DART Committee should evaluate each of the key issues by using multiple sources of data. The best sources of information on the key issues include:*

- Evaluations of these issues done by other state or federal courts
- Site visits to courts that have used DART for several years
- Phone calls to additional courts that use DART
- Surveys of trial and appellate judges, prosecutors, defense attorneys, and civil trial attorneys in jurisdictions that have used DART for several years

Recommendation 2: *The DART Committee should obtain information on the following types of costs associated with digital recording systems:*

- (1) *Purchase of all equipment & software*
- (2) *Upgrades to ICIS network for backup & archiving (if necessary)*
- (2) *Installation*
- (3) *Maintenance/service agreements*
- (4) *Periodic upgrading/replacement of the equipment and software, and*
- (5) *Staffing to monitor and manage the systems*

The committee can obtain information on most of these issues from the responses to the Request for Information (RFI) submitted by 11 DART vendors in early June. We can obtain additional information, especially pertaining to staffing (item (e) above) during site visits to courts that use DART and through surveys sent to other jurisdictions that have been using DART for several years.

Recommendation 3: *The best sources of information for assessing the reliability of digital recording systems would come from courts that have used these systems for several years. See Recommendation 1.*

Recommendation 4: *There are two components to the accuracy of the “record” made with DART and should obtain information from multiple sources on each component:*

- (1) The completeness and clarity of the digital recordings and
- (2) The accuracy of the written transcripts obtained from the digital record.

If a digital recording is complete and clear, a competent transcriptionist should be able to produce a complete and accurate written transcript. (See Recommendation 1 for the best sources of information for assessing accuracy; see Recommendation 10 for additional strategies).

Recommendation 5: *The committee should obtain information from jurisdictions that use DART regarding their education and training requirements for transcriptionists who produce official transcripts from digital recordings.*

Recommendation 6 [RE: Site visits]: *For obtaining information from jurisdictions where the committee sends teams to conduct site visits:*

- (1) The committee should use standard questionnaires for obtaining comparable information on costs, reliability, operation, and management of the DART system and the accuracy of the transcripts obtained from the digital recordings
- (2) The site visit team should meet with the same key groups of people (judges, attorneys, court managers, court reporters) in each location to discuss the various issues (see #1 above) and obtain their views on the operation, reliability, and accuracy of the records produced by the DART system.
- (3) A representative of each site visit team should be responsible for drafting a site visit report that is in a standard format, so each site visit report will cover the same issues and will be organized in the same way.

Recommendation 7 [RE: Information from other jurisdictions that use DART]:
*For obtaining information on jurisdictions that use DART, but where the committee will **not be conducting site visits**, the committee should use brief standard questionnaires to survey judges (trial and appellate courts), attorneys, and court managers regarding the reliability of the DART systems and the accuracy of the records (digital and written transcripts) obtained from those systems. [Note: These could be done via an online survey program whereby we could email a website link to potential respondents, ask them to click the link and fill out a two or three-page questionnaire online.]*

The subcommittee recommends the following survey strategy:

- (1) Identify some states that use only DART (e.g., Utah, Vermont, Kentucky) and some states that use a combination of DART and court reporters (e.g., Florida, New Jersey, Oregon)
- (2) *Role of Chief Justice:* The CJ could contact the CJ in the selected states to request their assistance in soliciting participation in the survey by the appellate court and trial judges in the state.
- (3) *Role of Attorney General's Office:* The DART Committee's representative from the AG's office could contact their counterparts in the selected states and ask their assistance in soliciting participation in the survey by attorneys in their offices.
- (4) *Role of State Public Defender's Office:* The DART Committee's representative from State PD's office could contact their counterparts in the selected states and ask their assistance in soliciting participation in the survey by attorneys in their offices.
- (5) *Role of the State Bar Association:* The ISBA president could contact his or her counterparts in the selected states and ask their assistance in soliciting participation in the survey by civil trial attorneys in their states.

Committee staff will coordinate the survey distribution, data analysis, and production of a brief report on the findings.

Recommendation 8 [RE: DART tests in Iowa courtrooms]: *The committee should ask each of the four vendors who provided demonstrations of their DART systems on June 26 to install a system in at least one courtroom in Iowa for a six to eight-week period.* The subcommittee also recommends that at least one DART system should be installed in a courtroom that a substantial amount of time will be spent on the following types of cases:

- (1) Juvenile (possibly a portable system that can be used by an Associate Juvenile Judge who travels to multiple counties)
- (2) High volume (DAJ) criminal calendars
- (3) Serious criminal trials -- including jury trials
- (4) Civil and/or dissolution trials -- including jury trials

One or two of the locations should be courtrooms that have acoustic challenges. In addition, vendors must:

- *Train court staff* on how to manage their respective systems and maintain log notes, and
- *Train the judges* on how to use the system and the appropriate protocol for courtrooms that are creating a record via digital recordings.

Recommendation 9: *The committee should be cautious about conclusions drawn from evaluating a small sample of recordings obtained from a these test courtrooms.*

The test of various DART systems in 4 or more courtrooms for a couple months will provide valuable information for committee members and other judges, attorneys, court reporters, and court staff. It will provide a means to learn how DART systems operate and to provide first-hand knowledge regarding the courtroom protocols required to produce clear and complete digital recordings of court proceedings and an opportunity to examine some of those recordings for their completeness and clarity.

However, a valid and reliable evaluation of the accuracy of digital recordings is complicated by many factors that can influence the accuracy of those recordings. As one of the vendors explained on June 26, the accuracy of digital recordings depends to a great extent on the quality of the recording equipment. In addition, the quality of AV recordings can be affected by:

- The extent to which courtroom participants comply with the necessary protocol for creating an accurate AV recording of the proceedings (e.g., speaking only when near a microphone; speaking with sufficient volume; responding verbally – not with gestures; only one person speaking at a time)
- The varying acoustic qualities of courtrooms
- The learning curve for judges and attorneys could more than 8 weeks
- The nature of proceedings vary greatly
- There will be unusual tension and stress in these courtrooms, especially for judges and court reporters if they believe the test period could determine the outcome of the DART Committee’s final recommendations
- Court reporters typically intervene to insist that witnesses and attorneys speak loudly and clearly – and that only one person speak at a time; this creates an artificially clear audio record

In this complex context, to evaluate the accuracy of digital recordings in a manner that would produce statistically significant results, the committee might need to contract with a professional research team. They would probably need to select a large sample or samples of proceedings in the test courtrooms to control for the effects of all the different factors, and the recordings would have to be examined by a skilled neutral evaluator. The cost of such a study is probably prohibitive.

Recommendation 10 [RE: Evaluation of recordings from test courtrooms]: *The committee should consider using 1 or more of the following strategies for a first-hand examination of the clarity and completeness of digital recordings of court proceedings in the test courtrooms (with the caveat that the findings be weighed appropriately given the concerns identified above):*

(1) *Review of digital recordings from Iowa test courtrooms by teams of 3 or 4 committee members*

- Each committee member should be on one of the teams
- Each team will be assigned 4 half-hour recordings
 - [Note: each vendor has its own “audio player” software, so you’ll need to use a different program to listen to recordings from each vendor’s system; if each team listens to 4 recordings from the same courtroom, they’ll have to learn how to use just one of the audio player programs; if they listen to 1 recording from 4 different courtrooms, they’ll have to learn to use 4 different audio player programs]
- The recordings will be delivered on a CD
- Team members will listen to the recordings on their own time – using their home or office computer, the appropriate audio player software, and headphones
- Each team will conduct a conference call to discuss the completeness and clarity of the 4 recordings and identify any problems (e.g., number of inaudible utterances)
- At a subsequent committee meeting (late September or October), one of the team members will report the group’s findings on the clarity and completeness of the recordings.
- [Note: Committee members should be encouraged to listen to additional digital recordings obtained from the test courtrooms, if they wish to do so; the subcommittee recommends 4 as a minimum.]

(2) *Review of digital recordings from courtrooms in a few other jurisdictions that have used DART for several years*

- We will contact some jurisdictions that have been using DART for several years and ask if they will send us examples of digital recordings from a sample of different courtrooms.
- Each team (above) could listen to 1 or 2 half-hour recordings from other jurisdictions – and discuss those recordings along with the recordings from the Iowa test courtrooms. A team spokesperson will report on the completeness and clarity of those recordings at a subsequent committee meeting.
- [Note: The availability of recordings from other jurisdictions might vary. In Minneapolis and possibly all of Minnesota, the audio recording is not the official record and is not available to the public because their system records *everything* that is said in the courtroom, which sometimes includes confidential discussions between attorneys and clients. A written transcript – which leaves out any attorney-client communications – is the official public record.]

(3) *Performance of a scripted 20-minute hearing in each of the four test courtrooms*

- Develop a 20 to 25 minute script of a court hearing (or obtain one from an existing trial transcript) and write the script to ensure that a variety of challenging situations arise (e.g., witness who mumbles or speaks softly; two attorneys speaking at the same time; attorneys walking away from the microphone)
- Have a team of courtroom actors (possibly law students?) memorize their lines and movements around the courtroom; then perform the one act play in each of the test courtrooms.
- Appoint a subcommittee/team to listen to the digital recordings from each location while reading the script to determine whether each recording is complete and accurate.
- A spokesperson from that subcommittee/team will report to the full committee at a subsequent committee meeting.

(4) *Compare court reporter transcripts to transcripts from digital recordings from 4 proceedings (20 to 30 minutes each) -- 1 from each test courtroom*

- The committee co-chairs will select the proceedings to be included in this assessment after the proceedings have been concluded, so participants will not know in advance
- The court reporters will be asked to produce a transcript for the selected hearings
- The digital recording for that hearing will be sent to a professional transcription service that specializes in court transcripts (possibly one recommended by a state that uses a professional transcription service).
- Each committee member will be on a team that will review both transcripts (from the court reporter and from the professional transcription service) – plus – a copy of the digital recording from at least 1 of the 4 proceedings.
- Each team member should:
 - Listen to the digital recording while reading each transcript (using headphones, the appropriate digital player, and a home or office computer)
 - Mark each transcript where it varies from the digital recording
 - Also keep written notes on the times (i.e., hr.-min.-sec.) on the digital recording where “inaudible” utterances occurred, if any
- Each team will conduct a conference call to discuss their findings
 - A team member will report the team’s findings to the full committee at a subsequent meeting